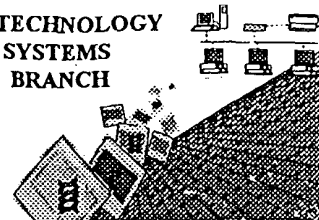


BIOTECHNOLOGY
SYSTEMS
BRANCH



RAW SEQUENCE LISTING
ERROR REPORT

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) detected errors when processing the following computer readable form:

Application Serial Number: 10/605,452A

Source: IFWO

Date Processed by STIC: 2/12/04

THE ATTACHED PRINTOUT EXPLAINS DETECTED ERRORS.

PLEASE FORWARD THIS INFORMATION TO THE APPLICANT BY EITHER:

- 1) INCLUDING A COPY OF THIS PRINTOUT IN YOUR NEXT COMMUNICATION TO THE APPLICANT, WITH A NOTICE TO COMPLY or,
- 2) TELEPHONING APPLICANT AND FAXING A COPY OF THIS PRINTOUT, WITH A NOTICE TO COMPLY

FOR CRF SUBMISSION AND PATENTIN SOFTWARE QUESTIONS, PLEASE CONTACT MARK SPENCER, TELEPHONE: 703-308-4212; FAX: 703-308-4221

Effective 12/13/03: TELEPHONE: 571-272-2510; FAX: 571-273-0221

TO REDUCE ERRORED SEQUENCE LISTINGS, PLEASE USE THE **CHECKER VERSION 4.1 PROGRAM**, ACCESSIBLE THROUGH THE U.S. PATENT AND TRADEMARK OFFICE WEBSITE. SEE BELOW FOR ADDRESS:

<http://www.uspto.gov/web/offices/pac/checker/chkr41note.htm>

Applicants submitting genetic sequence information electronically on diskette or CD-Rom should be aware that there is a possibility that the disk/CD-Rom may have been affected by treatment given to all incoming mail.

Please consider using alternate methods of submission for the disk/CD-Rom or replacement disk/CD-Rom.

Any reply including a sequence listing in electronic form should NOT be sent to the 20231 zip code address for the United States Patent and Trademark Office, and instead should be sent via the following to the indicated addresses:

1. EFS-Bio (<<http://www.uspto.gov/ebc/efs/downloads/documents.htm>> , EFS Submission User Manual - ePAVE)
2. U.S. Postal Service: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450
3. Hand Carry directly to (EFFECTIVE 12/01/03):
U.S. Patent and Trademark Office, Box Sequence, Customer Window, Lobby, Room 1B03, Crystal Plaza Two, 2011 South Clark Place, Arlington, VA 22202
4. Federal Express, United Parcel Service, or other delivery service to: U.S. Patent and Trademark Office, Box Sequence, Room 1B03-Mailroom, Crystal Plaza Two, 2011 South Clark Place, Arlington, VA 22202

Revised 10/08/03



IFWO

RAW SEQUENCE LISTING

DATE: 02/12/2004

PATENT APPLICATION: US/10/605,452A

TIME: 12:31:00

Input Set : D:\Amended Sequence Listing.txt

Output Set: N:\CRF4\02122004\J605452A.raw

3 <110> APPLICANT: University of South Florida
 5 <120> TITLE OF INVENTION: NOVEL SH2-CONTAINING INOSITOL 5'-PHOSPHATASE ISOFORM THAT
 6 PARTNERS WITH THE GRB2 ADAPTER PROTEIN
 8 <130> FILE REFERENCE: 1372.79.PR
 C--> 10 <140> CURRENT APPLICATION NUMBER: US/10/605,452A
 C--> 11 <141> CURRENT FILING DATE: 2003-09-30
 13 <160> NUMBER OF SEQ ID NOS: 10
 15 <170> SOFTWARE: PatentIn version 3.2

*only errored pages
shown - pp 1-10*

ERRORED SEQUENCES

Does Not Comply
Corrected Diskette Needed

17 <210> SEQ ID NO: 1
 18 <211> LENGTH: 4125
 19 <212> TYPE: DNA
 20 <213> ORGANISM: Mouse
 22 <400> SEQUENCE: 1
 24 Gly Thr Thr Cys Cys Cys Ala Cys Thr Ala Gly Thr Thr Gly Thr Thr
 25 1 5 10 15
 28 Gly Ala Ala Cys Thr Thr Thr Ala Cys Cys Thr Thr Gly Ala Ala Cys
 29 20 25 30
 32 Cys Thr Cys Thr Gly Cys Thr Cys Cys Cys Ala Gly Gly Gly Ala Ala
 33 35 40 45
 36 Gly Thr Cys Ala Thr Cys Ala Gly Gly Ala Cys Thr Cys Thr Gly Cys
 37 50 55 60
 40 Cys Ala Thr Cys Cys Cys Thr Gly Gly Ala Gly Thr Cys Thr Cys Thr
 41 65 70 75 80
 44 Gly Cys Ala Gly Ala Gly Gly Thr Thr Gly Thr Thr Thr Gly Ala Cys
 45 85 90 95
 48 Cys Ala Ala Cys Ala Gly Cys Thr Cys Thr Cys Cys Cys Cys Ala Gly
 49 100 105 110
 52 Gly Cys Cys Thr Thr Cys Gly Cys Cys Ala Cys Gly Ala Cys Cys
 53 115 120 125
 56 Thr Cys Ala Gly Gly Thr Gly Cys Cys Cys Gly Gly Ala Gly Ala Gly
 57 130 135 140
 60 Gly Cys Cys Ala Gly Thr Cys Cys Cys Ala Thr Cys Ala Cys Cys Ala
 61 145 150 155 160
 64 Thr Gly Gly Thr Thr Gly Cys Cys Ala Ala Ala Cys Thr Cys Ala Gly
 65 165 170 175
 68 Cys Cys Ala Ala Thr Thr Gly Ala Cys Ala Ala Gly Thr Cys Thr Gly
 69 180 185 190
 72 Cys Thr Gly Thr Cys Thr Thr Cys Cys Ala Thr Thr Gly Ala Ala Gly
 73 195 200 205

SPRT OK This is not a DNA sequence.

*Due to size,
only this
page of sequence
I shown.*

*This is
the only page
showing an error.*

2

RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/605,452A

DATE: 02/12/2004

TIME: 12:31:00

Input Set : D:\Amended Sequence Listing.txt

Output Set: N:\CRF4\02122004\J605452A.raw

1056	Cys	Cys	Thr	Cys	Thr	Thr	Cys	Thr	Thr	Cys	Cys	Cys	Ala	Ala	Gly
1057		3935					3940					3945			
1060	Cys	Thr	Cys	Thr	Gly	Gly	Gly	Gly	Thr	Gly	Cys	Ala	Cys	Cys	Cys
1061		3950					3955					3960			
1064	Thr	Gly	Thr	Gly	Thr	Cys	Cys	Thr	Thr	Gly	Gly	Thr	Thr	Ala	Cys
1065		3965					3970					3975			
1068	Cys	Ala	Gly	Gly	Ala	Gly	Ala	Cys	Thr	Ala	Gly	Gly	Gly	Thr	Thr
1069		3980					3985					3990			
1072	Gly	Thr	Gly	Ala	Thr	Ala	Thr	Cys	Thr	Thr	Thr	Thr	Cys	Thr	Thr
1073		3995					4000					4005			
1076	Gly	Thr	Cys	Thr	Thr	Gly	Cys	Thr	Thr	Thr	Thr	Thr	Gly	Ala	Thr
1077		4010					4015					4020			
1080	Ala	Thr	Ala	Thr	Cys	Ala	Gly	Gly	Ala	Thr	Thr	Ala	Ala	Thr	Gly
1081		4025					4030					4035			
1084	Thr	Ala	Gly	Gly	Ala	Ala	Ala	Cys	Cys	Ala	Gly	Ala	Cys	Cys	Thr
1085		4040					4045					4050			
1088	Ala	Gly	Ala	Thr	Thr	Ala	Thr	Thr	Cys	Ala	Gly	Gly	Ala	Gly	Ala
1089		4055					4060					4065			
1092	Gly	Thr	Ala	Gly	Gly	Thr	Ala	Thr	Ala	Thr	Cys	Cys	Cys	Cys	Thr
1093		4070					4075					4080			
1096	Gly	Thr	Gly	Thr	Thr	Thr	Cys	Cys	Cys	Ala	Gly	Thr	Cys	Thr	Gly
1097		4085					4090					4095			
1100	Ala	Gly	Thr	Gly	Ala	Cys	Cys	Ala	Ala	Thr	Ala	Ala	Ala	Ala	Thr
1101		4100					4105					4110			
1104	Thr	Gly	Thr	Gly	Cys	Cys	Thr	Thr	Thr	Cys	Thr	Ala			
OK 1105		4115					4120					4125			

1108 <210> SEQ ID NO: 2

1109 <211> LENGTH: 3942

1110 <212> TYPE: DNA PRT

1111 <213> ORGANISM: Mouse

1113 <400> SEQUENCE: 2

only this page of seq. 2 shown

1115	Gly	Thr	Thr	Cys	Cys	Cys	Ala	Cys	Thr	Ala	Gly	Thr	Thr	Gly	Thr	Thr
1116	1			5						10				15		
1119	Gly	Ala	Ala	Cys	Thr	Thr	Thr	Ala	Cys	Cys	Thr	Thr	Gly	Ala	Ala	Cys
1120				20						25				30		
1123	Cys	Thr	Cys	Thr	Gly	Cys	Thr	Cys	Cys	Cys	Ala	Gly	Gly	Gly	Ala	Ala
1124				35						40				45		
1127	Gly	Thr	Cys	Ala	Thr	Cys	Ala	Gly	Gly	Ala	Cys	Thr	Cys	Thr	Gly	Cys
1128				50						55				60		
1131	Cys	Ala	Thr	Cys	Cys	Cys	Thr	Gly	Gly	Ala	Gly	Thr	Cys	Thr	Cys	Thr
1132	65						70					75			80	
1135	Gly	Cys	Ala	Gly	Ala	Gly	Gly	Thr	Thr	Gly	Thr	Thr	Thr	Gly	Ala	Cys
1136				85						90				95		
1139	Cys	Ala	Ala	Cys	Ala	Gly	Cys	Thr	Cys	Thr	Cys	Cys	Cys	Cys	Ala	Gly
1140				100						105				110		
1143	Gly	Cys	Cys	Thr	Thr	Cys	Gly	Cys	Cys	Cys	Ala	Cys	Gly	Ala	Cys	Cys
1144				115						120				125		
1147	Thr	Cys	Ala	Gly	Gly	Thr	Gly	Cys	Cys	Cys	Gly	Gly	Ala	Gly	Ala	Gly
1148				130						135				140		

3

RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/605,452A

DATE: 02/12/2004

TIME: 12:31:01

Input Set : D:\Amended Sequence Listing.txt

Output Set: N:\CRF4\02122004\J605452A.raw

2131 Thr Thr Ala Thr Thr Cys Ala Gly Gly Ala Gly Ala Gly Thr Ala
 2132 3875 3880 3885
 2135 Gly Gly Thr Ala Thr Ala Thr Cys Cys Cys Cys Thr Gly Thr Gly
 2136 3890 3895 3900
 2139 Thr Thr Thr Cys Cys Cys Ala Gly Thr Cys Thr Gly Ala Gly Thr
 2140 3905 3910 3915
 2143 Gly Ala Cys Cys Ala Ala Thr Ala Ala Ala Ala Thr Thr Gly Thr
 2144 3920 3925 3930
 2147 Gly Cys Cys Thr Thr Thr Cys Thr Ala
 2148 3935 3940
 2151 <210> SEQ ID NO: 3
 2152 <211> LENGTH: 4147
 2153 <212> TYPE: DNA PRT
 2154 <213> ORGANISM: Human
 2156 <400> SEQUENCE: 3
 2158 Cys Gly Cys Cys Cys Ala Cys Thr Ala Ala Thr Cys Cys Thr Thr Gly
 2159 1 5 10 15
 2162 Ala Thr Gly Thr Thr Cys Ala Cys Cys Thr Thr Gly Thr Cys Cys Cys
 2163 20 25 30
 2166 Cys Thr Gly Cys Cys Cys Cys Cys Ala Gly Ala Gly Ala Ala Gly Thr
 2167 35 40 45
 2170 Cys Ala Thr Cys Cys Gly Gly Ala Cys Cys Cys Thr Cys Cys Cys Ala
 2171 50 55 60
 2174 Thr Cys Cys Cys Thr Gly Gly Ala Gly Thr Cys Thr Cys Thr Gly Cys
 2175 65 70 75 80
 2178 Ala Gly Ala Gly Gly Thr Thr Ala Thr Thr Gly Ala Cys Cys Ala
 2179 85 90 95
 2182 Gly Cys Ala Gly Cys Thr Cys Thr Cys Cys Cys Cys Gly Gly Gly Cys
 2183 100 105 110
 2186 Cys Thr Cys Cys Gly Thr Cys Cys Ala Cys Gly Thr Cys Cys Thr Cys
 2187 115 120 125
 2190 Ala Gly Gly Thr Thr Cys Cys Thr Gly Gly Thr Gly Ala Gly Gly Cys
 2191 130 135 140
 2194 Cys Ala Ala Thr Cys Cys Cys Ala Thr Cys Ala Ala Cys Ala Thr Gly
 2195 145 150 155 160
 2198 Gly Thr Gly Thr Cys Cys Ala Ala Gly Cys Thr Cys Ala Gly Cys Cys
 2199 165 170 175
 2202 Ala Ala Cys Thr Gly Ala Cys Ala Ala Gly Cys Cys Thr Gly Thr Thr
 2203 180 185 190
 2206 Gly Thr Cys Ala Thr Cys Cys Ala Thr Thr Gly Ala Ala Gly Ala Cys
 2207 195 200 205
 2210 Ala Ala Gly Gly Thr Cys Ala Ala Gly Gly Cys Cys Thr Thr Gly Cys
 2211 210 215 220
 2214 Thr Gly Cys Ala Cys Gly Ala Gly Gly Gly Thr Cys Cys Thr Gly Ala
 2215 225 230 235 240
 2218 Gly Thr Cys Thr Cys Cys Gly Cys Ala Cys Cys Gly Gly Cys Cys Cys
 2219 245 250 255
 2222 Thr Cys Cys Cys Thr Thr Ala Thr Cys Cys Cys Thr Cys Cys Ala Gly
 2223 260 265 270

4

RAW SEQUENCE LISTING

DATE: 02/12/2004

PATENT APPLICATION: US/10/605,452A

TIME: 12:31:01

Input Set : D:\Amended Sequence Listing.txt

Output Set: N:\CRF4\02122004\J605452A.raw

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3206 Thr Gly Ala Thr Gly Thr Cys Thr Thr Thr Cys Cys Thr Thr Ala
3207      3995      4000      4005
3210 Thr Gly Thr Thr Gly Cys Thr Thr Thr Thr Thr Cys Ala Ala Cys
3211      4010      4015      4020
3214 Ala Thr Ala Gly Cys Ala Gly Ala Ala Thr Thr Ala Ala Thr Gly
3215      4025      4030      4035
3218 Thr Ala Gly Gly Gly Ala Gly Cys Thr Ala Ala Ala Thr Cys Cys
3219      4040      4045      4050
3222 Ala Gly Thr Gly Gly Thr Gly Thr Gly Thr Gly Thr Gly Ala Ala
3223      4055      4060      4065
3226 Thr Gly Cys Ala Gly Ala Ala Gly Gly Gly Ala Ala Thr Gly Cys
3227      4070      4075      4080
3230 Ala Cys Cys Cys Cys Ala Cys Ala Thr Thr Cys Cys Cys Ala Thr
3231      4085      4090      4095
3234 Gly Ala Thr Gly Gly Ala Ala Gly Thr Cys Thr Gly Cys Gly Thr
3235      4100      4105      4110
3238 Ala Ala Cys Cys Ala Ala Thr Ala Ala Ala Thr Thr Gly Thr Gly
3239      4115      4120      4125
3242 Cys Cys Thr Thr Thr Cys Thr Cys Ala Cys Thr Cys Ala Ala Ala
3243      4130      4135      4140
3246 Ala Cys Cys Cys

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OK

3247 4145

3250 <210> SEQ ID NO: 4

3251 <211> LENGTH: 457

3252 <212> TYPE: DNA PRT

3253 <213> ORGANISM: Mouse

3255 <400> SEQUENCE: 4

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3257 Ala Ala Gly Cys Thr Gly Ala Thr Gly Thr Cys Ala Cys Thr Gly Cys
3258 1      5      10      15
3261 Thr Cys Thr Gly Cys Ala Ala Gly Gly Ala Gly Cys Thr Cys Cys Ala
3262      20      25      30
3265 Thr Gly Gly Gly Thr Ala Ala Cys Gly Gly Ala Gly Ala Gly Cys Cys
3266      35      40      45
3269 Cys Thr Gly Ala Gly Ala Gly Ala Gly Gly Gly Gly Thr Gly Gly Gly
3270      50      55      60
3273 Gly Gly Ala Gly Cys Thr Thr Cys Ala Thr Gly Gly Gly Thr Ala Ala
3274 65      70      75      80
3277 Thr Gly Gly Gly Ala Gly Cys Cys Cys Cys Thr Ala Cys Cys Cys Ala
3278      85      90      95
3281 Cys Cys Cys Ala Gly Gly Ala Gly Gly Ala Thr Gly Gly Cys Cys Ala
3282      100     105     110
3285 Cys Ala Gly Cys Ala Ala Gly Ala Gly Ala Ala Ala Gly Thr Gly Cys
3286      115     120     125
3289 Thr Cys Ala Thr Thr Ala Gly Ala Gly Thr Gly Ala Cys Cys Cys Thr
3290      130     135     140
3293 Gly Gly Gly Thr Cys Thr Cys Cys Thr Cys Thr Cys Thr Gly Thr Cys
3294 145     150     155     160
3297 Cys Ala Gly Ala Thr Gly Thr Cys Thr Cys Thr Gly Cys Ala Gly Cys
3298      165     170     175

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RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/605,452A

DATE: 02/12/2004

TIME: 12:31:01

Input Set : D:\Amended Sequence Listing.txt

Output Set: N:\CRF4\02122004\J605452A.raw

3301 Ala Cys Thr Cys Ala Cys Ala Gly Thr Ala Ala Thr Thr Gly Gly Cys
3302 180 185 190
3305 Cys Cys Ala Gly Gly Thr Gly Gly Ala Gly Thr Cys Thr Gly Gly Ala
3306 195 200 205
3309 Ala Thr Gly Thr Thr Cys Cys Ala Gly Gly Cys Thr Thr Gly Thr Thr
3310 210 215 220
3313 Gly Gly Ala Ala Gly Cys Thr Cys Thr Thr Gly Cys Thr Cys Thr Cys
3314 225 230 235 240
3317 Ala Thr Ala Gly Ala Ala Thr Cys Thr Gly Ala Gly Cys Thr Cys Thr
3318 245 250 255
3321 Ala Ala Cys Thr Gly Ala Gly Cys Thr Gly Gly Gly Ala Ala Ala Gly
3322 260 265 270
3325 Thr Thr Gly Ala Thr Cys Ala Thr Thr Thr Gly Thr Thr Ala Thr
3326 275 280 285
3329 Thr Cys Cys Thr Thr Thr Thr Ala Gly Gly Gly Thr Ala Thr Thr Gly
3330 290 295 300
3333 Gly Gly Gly Gly Gly Gly Cys Ala Cys Gly Gly Ala Thr Gly Thr Ala
3334 305 310 315 320
3337 Thr Gly Cys Ala Thr Gly Cys Thr Gly Gly Thr Ala Thr Gly Thr Ala
3338 325 330 335
3341 Thr Gly Cys Ala Thr Gly Cys Thr Gly Gly Gly Gly Ala Thr Gly Thr
3342 340 345 350
3345 Ala Gly Gly Gly Cys Cys Thr Cys Ala Thr Gly Thr Gly Thr Gly Cys
3346 355 360 365
3349 Thr Ala Ala Ala Thr Ala Cys Ala Thr Gly Thr Gly Cys Cys Thr Ala
3350 370 375 380
3353 Thr Thr Cys Thr Gly Thr Ala Ala Thr Gly Thr Thr Thr Thr Cys Thr
3354 385 390 395 400
3357 Thr Gly Thr Thr Thr Gly Thr Thr Thr Thr Thr Ala Ala Cys Thr Cys
3358 405 410 415
3361 Ala Ala Ala Thr Thr Ala Ala Thr Thr Ala Gly Ala Gly Gly Cys Ala
3362 420 425 430
3365 Gly Thr Thr Thr Cys Thr Cys Thr Gly Thr Thr Thr Ala Cys Cys Ala
3366 435 440 445
3369 Gly Cys Cys Cys Gly Gly Gly Cys Cys
3370 450 455

3373 <210> SEQ ID NO: 5

3374 <211> LENGTH: 938

3375 <212> TYPE: DNA

3376 <213> ORGANISM: Mouse

3378 <400> SEQUENCE: 5

3380 Ala Ala Ala Thr Cys Ala Cys Cys Ala Cys Ala Cys Gly Gly Cys Cys

3381 1 5 10 15

3384 Ala Ala Thr Ala Cys Thr Cys Cys Cys Cys Cys Cys Cys Ala Ala Cys

3385 20 25 30

3388 Thr Cys Cys Thr Cys Cys Cys Ala Ala Ala Thr Cys Cys Cys Cys Thr

3389 35 40 45

3392 Cys Thr Ala Cys Cys Cys Ala Cys Thr Cys Ala Ala Ala Thr Thr Cys

3393 50 55 60

OK

PRT

6

RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/605,452A

DATE: 02/12/2004

TIME: 12:31:01

Input Set : D:\Amended Sequence Listing.txt

Output Set: N:\CRF4\02122004\J605452A.raw

3592 Ala Cys Ala Gly Gly Ala Thr Thr Cys Ala Cys Cys Ala Cys Thr Gly
3593 850 855 860
3596 Gly Gly Gly Thr Gly Thr Gly Gly Cys Cys Thr Ala Thr Cys Thr Gly
3597 865 870 875 880
3600 Cys Thr Gly Thr Thr Ala Gly Gly Ala Cys Cys Thr Gly Ala Ala Thr
3601 885 890 895
3604 Thr Gly Cys Cys Thr Gly Gly Ala Gly Thr Gly Thr Thr Thr Cys Thr
3605 900 905 910
3608 Ala Gly Thr Thr Cys Cys Cys Ala Cys Thr Ala Gly Thr Thr Gly Thr
3609 915 920 925
3612 Thr Gly Ala Ala Cys Thr Thr Thr Ala Cys
3613 930 935
3616 <210> SEQ ID NO: 6
3617 <211> LENGTH: 986
3618 <212> TYPE: DNA PRT
3619 <213> ORGANISM: Mouse
3621 <400> SEQUENCE: 6
3623 Gly Cys Ala Asn Thr Cys Thr Gly Ala Gly Gly Ala Cys Thr Cys Thr
3624 1 5 10 15
3627 Gly Cys Cys Ala Thr Cys Cys Thr Gly Gly Ala Gly Thr Cys Thr Cys
3628 20 25 30
3631 Thr Gly Cys Ala Gly Ala Gly Gly Thr Thr Gly Thr Thr Thr Gly Ala
3632 35 40 45
3635 Cys Cys Ala Ala Cys Ala Gly Cys Thr Cys Thr Cys Cys Cys Ala
3636 50 55 60
3639 Gly Gly Cys Cys Thr Thr Cys Gly Cys Cys Cys Ala Cys Gly Ala Cys
3640 65 70 75 80
3643 Cys Thr Cys Ala Gly Gly Thr Ala Ala Gly Gly Gly Gly Thr Thr Thr
3644 85 90 95
3647 Gly Gly Ala Thr Thr Thr Gly Gly Ala Ala Ala Gly Ala Thr Gly Cys
3648 100 105 110
3651 Ala Ala Thr Thr Gly Cys Thr Ala Thr Ala Gly Gly Ala Gly Gly Gly
3652 115 120 125
3655 Ala Cys Thr Cys Thr Gly Ala Ala Gly Gly Cys Ala Gly Ala Cys Ala
3656 130 135 140
3659 Gly Ala Cys Gly Cys Ala Cys Cys Gly Cys Cys Thr Cys Cys Thr Cys
3660 145 150 155 160
3663 Ala Cys Gly Thr Thr Gly Gly Cys Thr Ala Gly Thr Cys Thr Ala Ala
3664 165 170 175
3667 Thr Ala Thr Ala Ala Ala Cys Ala Thr Cys Gly Cys Gly Gly Thr Gly
3668 180 185 190
3671 Gly Ala Thr Gly Gly Thr Gly Ala Gly Gly Ala Thr Ala Gly Ala Cys
3672 195 200 205
3675 Thr Cys Cys Ala Thr Gly Cys Cys Cys Thr Thr Thr Thr Gly Thr Gly
3676 210 215 220
3679 Ala Ala Gly Gly Cys Ala Thr Thr Thr Cys Cys Thr Gly Gly Cys Ala
3680 225 230 235 240
3683 Thr Cys Ala Gly Cys Thr Cys Cys Thr Gly Ala Cys Thr Thr Cys Ala
3684 245 250 255

RAW SEQUENCE LISTING

DATE: 02/12/2004

PATENT APPLICATION: US/10/605,452A

TIME: 12:31:01

Input Set : D:\Amended Sequence Listing.txt

Output Set: N:\CRF4\02122004\J605452A.raw

3784				645					650				655			
3787	Ala	Asn	Cys	Cys	Ala	Gly	Gly	Cys	Thr	Thr	Cys	Cys	Cys	Ala	Asn	Gly
3788				660					665				670			
3791	Thr	Thr	Thr	Thr	Thr	Thr	Thr	Thr	Thr	Cys	Ala	Cys	Ala	Ala	Ala	Ala
3792				675					680				685			
3795	Cys	Cys	Cys	Thr	Thr	Thr	Thr	Thr	Thr	Ala	Ala	Ala	Ala	Cys	Cys	Cys
3796				690					695				700			
3799	Thr	Asn	Thr	Cys	Thr	Ala	Ala	Thr	Cys	Cys	Asn	Thr	Ala	Cys	Thr	Cys
3800	705					710					715					720
3803	Asn	Thr	Thr	Asn	Asn	Asn	Cys	Cys	Asn	Thr	Cys	Ala	Asn	Thr	Ala	Cys
3804						725					730					735
3807	Cys	Ala	Thr	Asn	Asn	Cys	Ala	Asn	Asn	Thr	Cys	Cys	Cys	Thr	Cys	Thr
3808						740					745					750
3811	Thr	Thr	Cys	Asn	Cys	Cys	Thr	Asn	Cys	Asn	Asn	Thr	Cys	Thr	Ala	Cys
3812						755					760					765
3815	Thr	Thr	Thr	Thr	Asn	Thr	Asn	Cys	Cys	Asn	Cys	Thr	Asn	Asn	Thr	Gly
3816						770					775					780
3819	Asn	Asn	Cys	Asn	Ala	Thr	Thr	Ala	Thr	Thr	Thr	Thr	Cys	Cys	Thr	Cys
3820	785							790					795			800
3823	Thr	Thr	Cys	Asn	Cys	Thr	Thr	Asn	Thr	Gly	Thr	Thr	Ala	Thr	Ala	Thr
3824						805					810					815
3827	Asn	Ala	Asn	Ala	Thr	Ala	Ala	Thr	Thr	Cys	Thr	Cys	Cys	Cys	Ala	Ala
3828						820					825					830
3831	Cys	Cys	Cys	Cys	Thr	Cys	Ala	Cys	Cys	Cys	Cys	Thr	Cys	Thr	Thr	Thr
3832						835					840					845
3835	Ala	Thr	Thr	Cys	Thr	Asn	Ala	Asn	Asn	Asn	Asn	Asn	Ala	Thr	Thr	Thr
3836						850					855					860
3839	Thr	Gly	Asn	Cys	Ala	Thr	Cys	Thr	Gly	Cys	Cys	Thr	Cys	Cys	Asn	Asn
3840	865							870					875			880
3843	Thr	Thr	Ala	Asn	Asn	Asn	Thr	Thr	Asn	Asn	Thr	Cys	Cys	Thr	Cys	Asn
3844						885					890					895
3847	Cys	Thr	Thr	Cys	Ala	Asn	Cys	Thr	Asn	Cys	Thr	Thr	Cys	Cys	Ala	Thr
3848						900					905					910
3851	Thr	Asn	Gly	Gly	Thr	Thr	Gly	Thr	Asn	Ala	Cys	Thr	Cys	Asn	Ala	Asn
3852						915					920					925
3855	Asn	Thr	Thr	Thr	Asn	Cys	Thr	Asn	Thr	Cys	Thr	Cys	Thr	Thr	Ala	Asn
3856						930					935					940
3859	Asn	Asn	Cys	Thr	Thr	Cys	Asn	Cys	Gly	Asn	Asn	Asn	Asn	Thr	Thr	Cys
3860	945							950					955			960
3863	Thr	Cys	Cys	Ala	Asn	Thr	Cys	Cys	Asn	Cys	Thr	Asn	Asn	Cys	Cys	Thr
3864						965					970					975
3867	Asn	Cys	Asn	Cys	Cys	Ala	Asn	Cys	Cys	Cys						

3871 <210> SEQ ID NO: 7

3872 <211> LENGTH: 1001

3873 <212> TYPE: DNA PRT

3874 <213> ORGANISM: Mouse

3876 <400> SEQUENCE: 7

3878 Gly Gly Gly Ala Gly Asn Asn Asn Asn Ala Ala Thr Thr Ala Gly Asn

8

RAW SEQUENCE LISTING

DATE: 02/12/2004

PATENT APPLICATION: US/10/605,452A

TIME: 12:31:01

Input Set : D:\Amended Sequence Listing.txt

Output Set: N:\CRF4\02122004\J605452A.raw

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4075 785          790          795          800
4078 Gly Ala Ala Thr Ala Thr Ala Gly Gly Gly Gly Thr Gly Thr Thr Ala
4079          805          810          815
4082 Thr Cys Ala Gly Gly Cys Cys Ala Gly Gly Gly Thr Gly Gly Gly Ala
4083          820          825          830
4086 Ala Ala Ala Gly Cys Cys Thr Gly Gly Gly Ala Ala Thr Ala Gly Cys
4087          835          840          845
4090 Gly Ala Gly Cys Cys Ala Gly Ala Thr Ala Gly Cys Cys Thr Cys Ala
4091          850          855          860
4094 Cys Cys Cys Gly Gly Gly Ala Cys Ala Thr Thr Gly Ala Cys Cys Ala
4095 865          870          875          880
4098 Thr Cys Cys Cys Ala Gly Cys Cys Ala Thr Gly Thr Ala Gly Ala Thr
4099          885          890          895
4102 Ala Ala Ala Thr Cys Ala Gly Ala Gly Thr Thr Gly Ala Cys Ala Thr
4103          900          905          910
4106 Cys Ala Cys Cys Ala Ala Ala Gly Cys Cys Ala Gly Cys Cys Ala Cys
4107          915          920          925
4110 Thr Gly Ala Cys Thr Gly Cys Ala Thr Gly Thr Cys Thr Thr Ala Thr
4111          930          935          940
4114 Gly Cys Thr Cys Thr Gly Ala Ala Gly Gly Thr Gly Ala Ala Gly Thr
4115 945          950          955          960
4118 Cys Ala Gly Ala Gly Thr Cys Cys Cys Thr Gly Gly Gly Cys Ala Thr
4119          965          970          975
4122 Thr Cys Cys Thr Cys Ala Gly Ala Ala Ala Gly Cys Thr Cys Cys
4123          980          985          990
4126 Cys Ala Ala Ala Gly Gly Ala Asn Gly
4127          995          1000
4130 <210> SEQ ID NO: 8
4131 <211> LENGTH: 6498
4132 <212> TYPE: DNA
4133 <213> ORGANISM: Mouse
4135 <400> SEQUENCE: 8
4137 Gly Thr Ala Ala Cys Gly Gly Ala Gly Ala Gly Cys Cys Cys Thr Gly
4138 1          5          10          15
4141 Ala Gly Ala Gly Ala Gly Gly Gly Gly Thr Gly Gly Gly Gly Ala
4142          20          25          30
4145 Gly Cys Thr Thr Cys Ala Thr Gly Gly Thr Ala Ala Thr Gly Gly
4146          35          40          45
4149 Gly Ala Gly Cys Cys Cys Cys Thr Ala Cys Cys Cys Ala Cys Cys Cys
4150          50          55          60
4153 Ala Gly Gly Ala Gly Gly Ala Thr Gly Gly Cys Cys Ala Cys Ala Gly
4154 65          70          75          80
4157 Cys Ala Ala Gly Ala Gly Ala Ala Ala Gly Thr Gly Cys Thr Cys Ala
4158          85          90          95
4161 Thr Thr Ala Gly Ala Gly Thr Gly Ala Cys Cys Cys Thr Gly Gly Gly
4162          100          105          110
4165 Thr Cys Thr Cys Cys Thr Cys Thr Cys Thr Gly Thr Cys Cys Ala Gly
4166          115          120          125
4169 Ala Thr Gly Thr Cys Thr Cys Thr Gly Cys Ala Gly Cys Ala Cys Thr

```

E-4127
 4132 <212> TYPE: DNA PRT

9

RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/605,452A

DATE: 02/12/2004

TIME: 12:31:01

Input Set : D:\Amended Sequence Listing.txt

Output Set: N:\CRF4\02122004\J605452A.raw

5837 Gly Cys Cys Thr Gly Gly Ala Gly Thr Gly Thr Thr Thr Cys Thr
5838 6440 6445 6450
5841 Ala Gly Thr Thr Cys Cys Cys Ala Cys Thr Ala Gly Thr Thr Gly
5842 6455 6460 6465
5845 Thr Thr Gly Ala Ala Cys Thr Thr Thr Ala Cys Cys Thr Thr Gly
5846 6470 6475 6480
5849 Ala Ala Cys Cys Thr Cys Thr Gly Cys Thr Cys Cys Cys Ala Gly
5850 6485 6490 6495
5853 <210> SEQ ID NO: 9
5854 <211> LENGTH: 361
5855 <212> TYPE: DNA PRT
5856 <213> ORGANISM: Human
5858 <400> SEQUENCE: 9
5860 Ala Ala Thr Thr Thr Thr Cys Thr Ala Cys Ala Gly Gly Cys Thr Ala
5861 1 5 10 15
5864 Thr Ala Gly Ala Gly Thr Gly Cys Ala Gly Thr Thr Thr Gly Gly Cys
5865 20 25 30
5868 Thr Ala Ala Ala Gly Cys Ala Ala Ala Ala Cys Cys Thr Ala Gly Gly
5869 35 40 45
5872 Thr Ala Cys Ala Gly Thr Cys Ala Gly Gly Gly Ala Cys Thr Ala Cys
5873 50 55 60
5876 Ala Cys Ala Ala Thr Thr Cys Cys Ala Gly Thr Thr Cys Gly Cys Thr
5877 65 70 75 80
5880 Gly Thr Gly Gly Gly Thr Thr Gly Gly Gly Ala Ala Gly Gly Gly Ala
5881 85 90 95
5884 Thr Gly Gly Gly Thr Gly Gly Gly Cys Cys Ala Gly Thr Gly Cys Thr
5885 100 105 110
5888 Gly Gly Cys Ala Ala Gly Cys Cys Thr Thr Gly Ala Thr Cys Thr Thr
5889 115 120 125
5892 Thr Gly Cys Cys Cys Gly Gly Gly Cys Thr Thr Gly Thr Cys Cys Thr
5893 130 135 140
5896 Thr Cys Thr Gly Gly Gly Gly Ala Gly Ala Ala Thr Thr Ala Cys Cys
5897 145 150 155 160
5900 Thr Gly Cys Thr Thr Cys Thr Gly Cys Thr Gly Gly Ala Cys Thr Gly
5901 165 170 175
5904 Ala Gly Gly Gly Thr Gly Cys Cys Cys Thr Cys Ala Thr Cys Thr Cys
5905 180 185 190
5908 Thr Gly Gly Cys Thr Ala Gly Ala Gly Cys Cys Cys Gly Thr Gly Cys
5909 195 200 205
5912 Thr Gly Cys Cys Ala Thr Gly Gly Ala Ala Gly Ala Cys Thr Cys Thr
5913 210 215 220
5916 Thr Thr Cys Cys Gly Gly Thr Gly Cys Cys Cys Ala Cys Thr Ala Ala
5917 225 230 235 240
5920 Ala Thr Cys Cys Thr Thr Gly Ala Thr Gly Thr Thr Cys Ala Cys Cys
5921 245 250 255
5924 Thr Thr Gly Thr Cys Cys Cys Cys Thr Gly Cys Cys Cys Cys Cys Ala
5925 260 265 270
5928 Gly Ala Gly Ala Ala Gly Thr Cys Ala Thr Cys Cys Gly Gly Ala Cys
5929 275 280 285

10

RAW SEQUENCE LISTING

DATE: 02/12/2004

PATENT APPLICATION: US/10/605,452A

TIME: 12:31:01

Input Set : D:\Amended Sequence Listing.txt

Output Set: N:\CRF4\02122004\J605452A.raw

5932 Cys Cys Thr Cys Cys Cys Ala Thr Cys Cys Cys Thr Gly Gly Ala Gly
 5933 290 295 300
 5936 Thr Cys Thr Cys Thr Gly Cys Ala Gly Ala Gly Gly Thr Thr Ala Thr
 5937 305 310 315 320
 5940 Thr Thr Gly Ala Cys Cys Ala Gly Cys Ala Gly Cys Thr Cys Thr Cys
 5941 325 330 335
 5944 Cys Cys Cys Gly Gly Gly Cys Cys Thr Cys Cys Gly Thr Cys Cys Ala
 5945 340 345 350
 5948 Cys Gly Thr Cys Cys Thr Cys Ala Gly
 5949 355 360
 5952 <210> SEQ ID NO: 10
 5953 <211> LENGTH: 279
 5954 <212> TYPE: DNA PRT
 5955 <213> ORGANISM: Human
 5957 <400> SEQUENCE: 10
 5959 Gly Thr Ala Ala Thr Gly Gly Cys Thr Gly Gly Cys Cys Cys Ala Cys
 5960 1 5 10 15
 5963 Gly Gly Gly Gly Gly Cys Gly Gly Gly Cys Ala Gly Gly Thr Gly Gly
 5964 20 25 30
 5967 Gly Gly Gly Cys Gly Gly Cys Cys Ala Cys Cys Ala Gly Gly Thr Gly
 5968 35 40 45
 5971 Ala Gly Ala Gly Ala Ala Ala Cys Ala Gly Cys Thr Cys Ala Thr Gly
 5972 50 55 60
 5975 Ala Gly Ala Gly Cys Gly Ala Cys Cys Thr Cys Thr Gly Cys Cys Thr
 5976 65 70 75 80
 5979 Cys Thr Gly Cys Cys Thr Gly Gly Cys Thr Gly Ala Ala Cys Ala Ala
 5980 85 90 95
 5983 Ala Thr Gly Cys Cys Thr Cys Thr Gly Cys Cys Gly Cys Ala Cys Thr
 5984 100 105 110
 5987 Cys Ala Cys Ala Ala Thr Ala Ala Thr Thr Gly Ala Gly Thr Gly Gly
 5988 115 120 125
 5991 Thr Gly Ala Gly Cys Ala Cys Ala Gly Cys Thr Thr Gly Gly Ala Ala
 5992 130 135 140
 5995 Ala Thr Cys Thr Cys Thr Gly Thr Gly Gly Thr Thr Gly Thr Thr Thr
 5996 145 150 155 160
 5999 Gly Gly Ala Gly Gly Thr Cys Thr Thr Gly Thr Thr Ala Thr Cys Ala
 6000 165 170 175
 6003 Thr Gly Gly Ala Ala Thr Thr Thr Gly Ala Ala Cys Ala Gly Thr Ala
 6004 180 185 190
 6007 Gly Cys Thr Thr Gly Thr Gly Thr Gly Thr Gly Cys Thr Gly Cys Ala
 6008 195 200 205
 6011 Gly Cys Thr Thr Thr Thr Thr Thr Ala Cys Ala Ala Cys Thr Ala Ala Ala
 6012 210 215 220
 6015 Gly Thr Thr Ala Ala Thr Thr Gly Gly Ala Gly Gly Cys Cys Ala Gly
 6016 225 230 235 240
 6019 Thr Thr Gly Cys Thr Cys Thr Gly Gly Gly Ala Ala Gly Cys Gly Gly
 6020 245 250 255
 6023 Ala Thr Gly Gly Gly Thr Gly Gly Gly Ala Gly Gly Ala Cys Ala
 6024 260 265 270

VERIFICATION SUMMARY

PATENT APPLICATION: US/10/605,452A

DATE: 02/12/2004

TIME: 12:31:02

Input Set : D:\Amended Sequence Listing.txt

Output Set: N:\CRF4\02122004\J605452A.raw

L:10 M:270 C: Current Application Number differs, Replaced Current Application Number
L:11 M:271 C: Current Filing Date differs, Replaced Current Filing Date
L:1105 M:301 E: (44) No Sequence Data was Shown, SEQ ID:1
L:1105 M:252 E: No. of Seq. differs, <211> LENGTH:Input:4125 Found:0 SEQ:1
L:2148 M:301 E: (44) No Sequence Data was Shown, SEQ ID:2
L:2148 M:252 E: No. of Seq. differs, <211> LENGTH:Input:3942 Found:0 SEQ:2
L:3247 M:301 E: (44) No Sequence Data was Shown, SEQ ID:3
L:3247 M:252 E: No. of Seq. differs, <211> LENGTH:Input:4147 Found:0 SEQ:3
L:3370 M:301 E: (44) No Sequence Data was Shown, SEQ ID:4
L:3370 M:252 E: No. of Seq. differs, <211> LENGTH:Input:457 Found:0 SEQ:4
L:3613 M:301 E: (44) No Sequence Data was Shown, SEQ ID:5
L:3613 M:252 E: No. of Seq. differs, <211> LENGTH:Input:938 Found:0 SEQ:5
L:3868 M:301 E: (44) No Sequence Data was Shown, SEQ ID:6
L:3868 M:252 E: No. of Seq. differs, <211> LENGTH:Input:986 Found:0 SEQ:6
L:4127 M:301 E: (44) No Sequence Data was Shown, SEQ ID:7
L:4127 M:252 E: No. of Seq. differs, <211> LENGTH:Input:1001 Found:0 SEQ:7
L:5850 M:301 E: (44) No Sequence Data was Shown, SEQ ID:8
L:5850 M:252 E: No. of Seq. differs, <211> LENGTH:Input:6498 Found:0 SEQ:8
L:5949 M:301 E: (44) No Sequence Data was Shown, SEQ ID:9
L:5949 M:252 E: No. of Seq. differs, <211> LENGTH:Input:361 Found:0 SEQ:9
L:6028 M:301 E: (44) No Sequence Data was Shown, SEQ ID:10
L:6028 M:252 E: No. of Seq. differs, <211> LENGTH:Input:279 Found:0 SEQ:10